WO 2005/057503 PCT/GB2004/005105

11

## Claims

5

10

15

25

- 1. A method of producing a three dimensional model of a built up area comprising obtaining a plan image of a built up area and processing the plan image to provide a model template of the built up area by identifying boundaries defining built up area units.
- 2. A method as claimed in claim 1 further comprising correlating the model template with a geographical database representing the built up area to assign identifiers from the geographical database to built up area units on the model template.
- 3. A method as claimed in claim 1 or claim 2 further comprising obtaining image data of the built up area from at least one viewpoint in the built up area.
- 4. A method as claimed in claim 3 in which the image data is at least one of laser image scan data and photographic image data.
- 5. A method as claimed in claim 3 or claim 4 in which the image data is correlated with the model template to identify built up area unit boundaries.
  - 6. A method as claimed in any of claims 3 to 5 in which image data showing a built up area unit is linked to the built up area unit on the model template.
  - 7. A method as claimed in any of claims 3 to 6 further comprising identifying the viewpoint on the model template and linking image data acquired from the viewpoint therewith.

- 8. A method as claimed in claim 7 further comprising tracing at least one nominal ray from a viewpoint and identifying a built up area unit intersected by the ray as visible from the viewpoint.
- 5 9. A method as claimed in any preceding claim in which the built up area unit comprises an identifiable geographic element.
  - 10. A method as claimed in claim 9 in which the built up area unit is identifiable by a postal address.

10

20

25

- 11. A method as claimed in claim 10 in which the built up area unit further comprises geographical elements in an environ associated with the postal address.
- 12. A method as claimed in any preceding claim in which the plan image is a photographic plan image.
  - 13. A method of producing a three dimensional model of a built up area comprising obtaining a plan image of the built up area, processing the plan image to provide a model template and correlating the plan image with a geographical database to assign identifiers to geographical elements on the model template.
  - 14. A method of producing a three dimensional model of a built up area comprising providing a model template and processing the model template to identify boundaries defining built up area units, in which the built up area units include an addressable geographical element and geographical elements in the environ thereof.

5

10

15

- 15. A method of producing a built up area database comprising providing a model template, acquiring image data from at least one viewpoint in the built up area, identifying the viewpoint on the model template and providing a link from the viewpoint on the model template to the assocated image data acquired therefrom.
- 16. A method of producing a three dimensional model of a built up area comprising obtaining photographic image data and laser scan image data of a built up area unit and correlating the photographic image data and laser scan image data to provide a three dimensional façade image for the built up area unit.
- 17. A method as claimed in claim 16 in which the photographic image data is spherical photographical image data.
- 18. A computer program comprising a set of instructions configured to implement the method of any of claims 1 to 17.
- 19. A computer readable medium storing a computer program as claimed in claim 18.
  - 20. A computer configured to operate under the instructions of a computer program as claimed in claim 18.